The National Development Council (NDC) in its 53rd meeting held on 29th May, 2007 has also emphasized to evolve a strategy to rejuvenate agriculture. It involves, *inter alia,* the following crucial elements:

- The State Governments are to prepare District and State Agriculture Plans for prioritizing the investment in the sector.
- Introduction of a new scheme for Additional Central Assistance (ACA) to State Plans. The newly created National Rainfed Area Authority (NRAA) would assist States in planning for rain fed areas.
- Provision of additional resources for irrigation.
- Strategic focus on the national agricultural research effort.
- New initiatives for skill development for the farming community.

The Government of India has recently approved two schemes for enhancement of foodgrains productivity and production and for improving overall growth of agriculture. These are: (i) National Food Security Mission (NFSM), and (ii) Additional Central Assistance Scheme (ACAS) for implementing the State and District Plans for agricultural development.

Declining fertility of soil

†1992. SHRI SURENDRA LATH:

SHRI RUDRA NARAYAN PANY:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether fertility of soil is constantly declining in the country;

(b) if so, the steps being taken to deal with this problem;

(c) whether the production per hectare is declining in comparison to earlier years despite use of good quality seeds, fertilizers, etc.;

(d) if so, the details thereof;

(e) whether Government are providing any help to the farmers to meet the losses incurred due to above situation; and

(f) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTI LAL BHURIA): (a) There are instances of deterioration of soil fertility/certain nutrient deficiencies in some parts of the country, especially in Indo-Gangetic plains, due to continuous imbalanced use of chemical fertilizers.

(b) The Government is promoting Integrated Nutrient Management (INM) by advocating soil test based balanced and judicious use of chemical fertilizer including secondary and micronutrients in conjunction with organic manures and bio-fertilizers. The Government is also educating farmers through training and field demonstration on balanced use of fertilizers for improving soil fertility.

†Original notice of the question was received in Hindi.

(c) and (d) The inadequate and imbalanced use of chemical fertilizers causing nutrient deficiencies coupled with falling organic carbon levels in soils have led to stagnation/decline in crop productivity in some parts of the country.

(e) and (f) The Government has recently approved 2 new schemes namely "National Food Security Mission" and "Additional Central Assistance" for improving productivity of crops.

Adverse effect of global warming on agriculture

1993. DR. BARUN MUKHERJEE: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that the FAO (UN) chief has recently predicted a huge loss of cereals production of India due to climate change;

(b) if so, whether Government agree to it and what is Government's assessment in this respect;

(c) which of the cereals may be worst affected;

(d) whether Government agree that such adverse effect of global wanning is a matter of great concern, particularly when India's growth rate in agricultural sector has alarmingly gone down; and

(e) what measures are being taken to combat such adverse situation?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA): (a) FAO Chief has predicted loss of cereal production in India due to climatic change. He stated that rainfed agriculture in marginal areas in semi-arid and sub-humid region is mostly at risk. He further suggested that science and technology including new tools available in the field of bio-technology must spearhead agricultural production in the coming years at a faster rate than in the past.

(b) and (c) Recent studies in Indian Council of Agricultural Research (ICAR) indicate the possibility of loss of 4-5 million metric tones of wheat production with every rise of 1°C temperature throughout the growth period. Wheat may be more affected than other cereals.

(d) and (e) Adverse effects of global warming are a matter of concern for the country's food security. Simple practices such as change in planting date and crop varieties could help in reducing the impact of climate change. ICAR has taken several measures to address this issue including adaptation to climate change. Wheat varieties such as NIAW 34, RAJ 3765, RAJ 4037 and DBW 14 have been developed. that are tolerant to rise in temperature. Resource Conservation Technologies like Zero Tillage Technology are being popularized. Zero Tillage Technology reduces the cost of cultivation, advances the time of wheat sowing (4-5 days), requires less water for the first irrigation and saves diesel. It thus, also helps reduce emission of green house gases.